2-1990

Why Dial? Pick Up the Phone and Scan Your Call, Says UD Professor; Cell Research on Mice May Help Burn Victims, Aids Patients Fight Diseases, Says University of Dayton Graduate Student

featuring UD

Story ideas for print and broadcast media

WHY DIAL? PICK UP THE PHONE AND SCAN YOUR CALL, SAYS UD PROFESSOR

As Dana Rogers watched a travel agent pull one business card after another out of her Rolodex and carefully dial numbers, something clicked. Why not design a machine that could scan a bar-coded telephone number off the back of a business card and dial the phone for you? Why not, indeed!

Rogers, a professor in electrical engineering at the University of Dayton, asked students in his advanced digital design class to tackle the project during the fall 1989 semester. By Christmas, "Teledex"--manufactured for less than $10--had replaced the Rolodex on Rogers' desk.

Students designed a computer-generated bar code label for each business card. The card is slid through the machine (made from several inexpensive electrical components), which uses "read heads" that optically scan and read the phone number, much like a credit card is scanned. A pulse is then sent to a telephone chip on the machine, which signals the telephone line and dials the number.

"This could be a great gift for salespersons to give clients," remarked Rogers. "They could give clients the machine and the business cards of several colleagues."

Rogers said the machine's use need not be limited to the workplace. He uses the Teledex at home to dial his local pizza parlor.

For media interviews, contact Dana Rogers at (513) 229-3611.

CELL RESEARCH ON MICE MAY HELP BURN VICTIMS, AIDS PATIENTS FIGHT DISEASES, SAYS UNIVERSITY OF DAYTON GRADUATE STUDENT

A University of Dayton graduate student is researching ways to activate infection-fighting white blood cells in persons with deficient immune systems to enable them to fight off diseases.

Duane Newton, a graduate student in biology at UD, is working under a $700 research grant from Sigma Xi, a scientific research society, to determine what role "natural killer" (NK) cells--a subpopulation of white blood cells that can regulate a patient's immune response--have in fighting infections. Newton is working with a bacterium not harmful to healthy individuals, but of great concern to burn victims and AIDS patients.

Newton has been working since May 1989 with mice--whose immune systems are virtually identical to humans--to determine what role NK cells play in fighting infections. He has found an increase in NK cell activity in infected mice and an increased ability in the mice to remove the bacterium when NK cells were depleted. Newton's next step is to determine if transferring NK-enriched cells to NK-depleted mice restores mice's ability to ward off infection--a finding that could prove true in humans as well.

For media interviews, contact Duane Newton at (513) 229-2924 or 229-2521.